

CLAIMS

1. A process for the extraction of ethanol from a solution, characterized by bringing the solution into contact with a bed of salt, whereby the salt adsorbs ethanol from the solution, removing the solution from the salt bed, heating of the salt bed in order to release the ethanol adsorbed thereby as vapour and collecting the ethanol.
- 10 2. A process according to Claim 1, characterized in that the salt is $Mg_3(PO_4)_2$.
- 15 3. A process according to Claim 1 or 2, characterized in that the salt preferentially adsorbs ethanol molecules from a low-grade ethyl-alcohol solution, whereby high-grade ethanol can be obtained from the low concentration alcohol solution, in a one-step process.
- 20 4. A process according to any of Claims 1-3, characterized in that the solution consists of a low-grade ethyl-alcohol liquid which has been separated from a mash.
- 25 5. A process according to any of Claims 1-4, characterized by passing a flow of the solution through the bed, sensing the ethyl-alcohol content of the solution leaving the bed, and stopping the input flow to the bed when the sensed alcohol content of the solution leaving the bed significantly raises above 0%, and collecting the solution leaving the bed 30 and having an alcohol content of about 0%.